

# Project Experience

## Various Projects

### **Electrical, Instrumentation, and Controls Design and Construction Support Services Public Service Company of New Mexico Water Services, Santa Fe, NM**

#### **Sangre De Cristo Water Company Facilities Rehabilitation Needs Study**

Timberline, as a subconsultant to Boyle Engineering, supported a comprehensive rehabilitation study of the Sangre de Cristo Water System in Santa Fe. As a study participant, Timberline's scope of services included the study and analysis of existing instrumentation and control interfaces at various water production and storage facilities. More specifically, Timberline services included field investigation, assessment of site conditions, review of options for improving system operations, development of a prioritization methodology, preparation of recommendations for specific improvements, and documentation of findings in a study report. Results of this study lead to follow-on design work on the Northwest Well, Torreon Pump Station, and Alto Pump Station projects.

#### **Torreon and Alto Pump Stations Rehabilitation Design and Construction Support Services**

The "Sangre De Cristo Water Company Facilities Rehabilitation Needs Study," for which Timberline authored the sections on instrumentation and controls, identified the need for rehabilitation of two existing pump stations, Torreon and Alto. As a subconsultant to Boyle Engineering, Timberline designed the instrumentation, and controls aspects of these projects. Also included in the design was the interface to PNM's existing SCADA system, which was designed by Timberline. Engineering services for this project include analysis of design concepts, detailed design, and preparation of bid documents including drawings, specifications and construction cost estimates. During construction, Timberline provided support services, including submittal review, technical support, start-up assistance, and final punch-list preparation.



THE SANGRE DE CRISTO WATER COMPANY IS LOCATED IN SANTA FE NEW MEXICO ALONG THE FOOTHILLS OF THE SANGRE DE CRISTO MOUNTAINS

#### **Northwest Well Design and Construction Support Services**

The "Sangre De Cristo Water Company Facilities Rehabilitation Needs Study," for which Timberline authored the sections on instrumentation and controls, identified the need for a new well in the Buckman trunk line. As a subconsultant to Boyle Engineering, Timberline designed the electrical, instrumentation, and controls aspects of the well for this very "fast-track" project. A particularly unique feature of the well was a dual-drive electric/natural gas engine well pump and associated controls and interlocks. Also included in the design was the interface to PNM's existing SCADA system, which was designed by Timberline. Engineering services for this project include analysis of design concepts, radio path profile analysis, detailed design, and preparation of bid documents including drawings, specifications and construction cost estimates. During

construction, Timberline provided support services, including submittal review, technical support, start-up assistance, and final punch-list preparation.

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